In response to the office action, please amend the above-referenced application as follows:

Amendments to the Claims

1 - 15. (Cancelled)

- 16. (Currently amended) A method of producing plant cells that accumulate carotenoids which cells are normally carotenoid-free said method comprising transforming plant material with an isolated DNA molecule comprising a nucleotide sequence which comprises:
- (a) an expression cassette capable of directing production in said cells of a phytoene synthase derived from a plant; and
- (b) an expression cassette capable of directing production in said cells of a phytoene desaturase derived from a plant bacteria; and selecting transformed plant material that comprises the cells that accumulate carotenoids.

17 - 31. (Cancelled)

- 32. (Currently amended) A method according to claim 31 16 wherein said phytoene desaturase is from the CrtI gene of *Erwinia uredovora*.
- 33. (Previously Presented) A method according to claim 16 wherein said phytoene desaturase is fused with a suitable plastid transit peptide.

- 34. (Previously Presented) A method according to claim 16 wherein said phytoene desaturase is expressed under the control of a tissue specific or constitutive promoter.
- 35. (Previously Presented) A method according to claim 34 wherein said phytoene desaturase is expressed under the control of a constitutive promoter.
- 36. (Previously Presented) A method according to claim 16 wherein said phytoene synthase is expressed under the control of a tissue specific promoter.
- 37. (Previously Presented) A method according to claim 36 wherein said phytoene synthase is derived from *Narcissus pseudonarcissus*.
- 38. (Currently amended) A method according to claims 16 wherein said DNA further comprises a polynucleotide which provides for a selectable marker.
- 39. (Previously presented) A method according to claim 16 wherein said plant material is transformed via an *Agrobacterium* which comprises said DNA.
- 40. (Previously presented) A method according to claim 16 wherein said plant cell is a rice plant cell.
- 41. (Previously presented) A method according to claim 16 wherein said cell is an endosperm cell.
- 42. (Previously presented) A transformed plant cell obtainable by a method of claim 16.
- 43. (Previously presented) A plant cell according to claim 42 which is a rice endosperm cell.

Claims 44 – 59 (Cancelled).